National Transportation Safety Board
Aviation Accident Final Report

Location:	LAREDO, TX	**Accident Number:**	FTW89LA041
Date & Time:	01/18/1989, 2043 CST	**Registration:**	XBDYP
Aircraft:	DOUGLAS DC-3	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	2 Serious
Flight Conducted Under:	Part 91: General Aviation - Other Work Use		

Analysis

THE PILOT STATED THAT DURING TAKEOFF FROM RUNWAY 35L, THE CO-PILOT ON THE FLIGHT CONTROLS REDUCED LEFT PROPELLER AND RIGHT ENGINE POWER AT AN ALTITUDE OF LESS THAN 100 FEET AGL. HE ATTEMPTED TO RESTORE TAKEOFF POWER WHILE APPLYING FORWARD PRESSURE ON THE CONTROL YOKE, BUT LOST CONTROL OF THE AIRCRAFT AND IMPACTED THE TERRAIN ADJACENT TO THE DEPARTURE RUNWAY. HE FURTHER STATED THAT THE CARGO MAY HAVE SHIFTED TO THE REAR OF THE AIRCRAFT DURING TAKEOFF.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PIC'S DISREGARD FOR THE SECURITY OF THE CARGO THAT PERMITTED ITS SHIFT DURING THE TAKOEFF ROLL. THIS RESULTED IN AN AFT CG SITUATION AND A SUBSEQUENT STALL AND LOSS OF AIRCRAFT CONTROL. A CONTRIBUTING FACTOR IN THE ACCIDENT WAS THE MISMANAGEMENT OF THE ENGINE POWER BY THE CREW AND THE LACK OF EXPERIENCE OF THE CO-PILOT.

Findings

Occurrence #1: CARGO SHIFT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. (F) SECURITY OF CARGO - DISREGARDED - PILOT IN COMMAND
2. (F) PROCEDURE INADEQUATE - PILOT IN COMMAND
3. (C) AIRCRAFT WEIGHT AND BALANCE - EXCEEDED

Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
4. (F) THROTTLE/POWER CONTROL - REDUCED - COPILOT/SECOND PILOT
5. (F) LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - COPILOT/SECOND PILOT
6. (F) PROPELLER - REDUCED - COPILOT/SECOND PILOT
7. (C) AIRSPEED(VS) - NOT MAINTAINED - PILOT IN COMMAND
8. STALL/MUSH - INADVERTENT - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings
9. TERRAIN CONDITION - GRASS

Factual Information

Pilot Information

Certificate:	Airline Transport; Commercial; Flight Engineer	**Age:**	40, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Seatbelt
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane Single-engine	**Toxicology Performed:**	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	09/08/1987
Occupational Pilot:		**Last Flight Review or Equivalent:**	
Flight Time:	8000 hours (Total, all aircraft), 3800 hours (Total, this make and model), 7700 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	DOUGLAS	**Registration:**	XBDYP
Model/Series:	DC-3 DC-3	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	No
Airworthiness Certificate:	Transport	**Serial Number:**	
Landing Gear Type:	Retractable - Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	Unknown	**Certified Max Gross Wt.:**	26900 lbs
Time Since Last Inspection:		**Engines:**	2 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	P&W
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	R1830-92
Registered Owner:		**Rated Power:**	1450 hp
Operator:	UNKNOWN	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	**Condition of Light:**	Night/Dark
Observation Facility, Elevation:	LRD, 508 ft msl	**Distance from Accident Site:**	0 Nautical Miles
Observation Time:	2045 CST	**Direction from Accident Site:**	0°
Lowest Cloud Condition:	Unknown / 2000 ft agl	**Visibility**	7 Miles
Lowest Ceiling:	Overcast / 2000 ft agl	**Visibility (RVR):**	0 ft
Wind Speed/Gusts:	Calm /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	16°C / 13°C
Precipitation and Obscuration:			
Departure Point:	LARDEO, TX (LRD)	**Type of Flight Plan Filed:**	VFR
Destination:	TORREON, MX (MMTC)	**Type of Clearance:**	VFR
Departure Time:	2044 CST	**Type of Airspace:**	Class D

Airport Information

Airport:	LAREDO INT'L (LRD)	**Runway Surface Type:**	Concrete
Airport Elevation:	508 ft	**Runway Surface Condition:**	Dry
Runway Used:	35L	**IFR Approach:**	None
Runway Length/Width:	7810 ft / 150 ft	**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	2 Serious	**Aircraft Damage:**	Destroyed
Passenger Injuries:	N/A	**Aircraft Fire:**	On-Ground
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 Serious	**Latitude, Longitude:**	

Administrative Information

Investigator In Charge (IIC):	JOHN E GRIFFIN	**Report Date:**	07/11/1990
Additional Participating Persons:	ROBERT ANDERSON GARY WORTHY		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.gov/pubdms/.		